Lusail Real Estate Development Company

Health, Safety, Security, Environment, Logistics & Quality Department

Lusail Construction Safety Procedural Forms/Checklists – Daily Excavation Inspection

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Amendment Record

This document is reviewed to ensure its continuing relevance to the systems and process that it describes. A record of contextual additions or omissions is given below:

Rev .No	Description / Comments	Prepared By	Checked By	Approved By	Issue Date
1	(Pg. 1) Company Propriety Information – Not controlled if printed has been added.	HSE Working Group	Michael Ford	Uwe Krueger	1st April 2015
1	(Pg. 2) Revised Amendment Table	HSE Working Group	Michael Ford Michael Ford	Uwe Krueger	1st April 2015

DAILY EXCAVATION INSPECTION

Site Location: _____

Date: _____ Time: _____ Competent Person: _____

Soil Type(s): _____

Soil Classification(s): _____ Excavation Depth: _____

Excavation Width: _____

Type of protective system used: _____

Indicate for each item by circling: Y (Yes), N (No), - Address in Comments, Not Applicable (N/A.)

I.	**General Inspection of Job Site**			
A.	Surface encumbrances removed or supported	Y	N	N/A
B.	Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation	Y	N	N/A
C.	Hard hats worn by all employees	Y	N	N/A
D.	Spoils, materials, and equipment set back at least 2 feet from the edge of the excavation	Y	N	N/A
E.	Barriers provided at all remotely located excavations, wells, pits, shafts, etc.	Y	N	N/A
F.	Walkways and bridges over excavations 4 feet or more in depth are equipped with standard guardrails	Y	N	N/A
G.	Warning vests or other highly visible clothing provided and worn by all employees exposed to public vehicular traffic	Y	N	N/A
H.	Warning system established and utilized when mobile equipment is operated near the edge of the excavation	Y	N	N/A
I.	Employees prohibited from working on the faces of sloped or benched excavations above other employees	Y	N	N/A
II.	**Utilities**			
A.	Utility companies contacted and/or utilities located	Y	N	N/A
B.	Exact location of utilities marked when approaching the utilities	Y	N	N/A
C.	Underground installations protected, supported or removed when excavation is open	Y	N	N/A
III.	**Means of Access and Egress**			
A.	Lateral travel to means of egress no greater than 25 feet in excavations 4 feet or more in depth	Y	N	N/A
B.	Ladders used in excavations secured and extended 3 feet above the edge of the trench	Y	N	N/A
C.	Structural ramps used by employees designed by a competent person	Y	N	N/A
D.	Structural ramps used for equipment designed by a registered professional engineer (RPE)	Y	N	N/A
E.	Ramps constructed of materials of uniform thickness, cleated together on the bottom, equipped with a no-slip surface	Y	N	N/A
F.	Employees protected from cave-ins when entering or exiting the excavation	Y	N	N/A

IV. Wet Conditions

A.	Precautions taken to protect employees from the accumulation of water	Y	N	N/A
B.	Water removal equipment monitored by a competent person	Y	N	N/A
C.	Surface water or runoff diverted or controlled to prevent accumulation in the excavation	Y	N	N/A
D.	Inspections made after every rainstorm or other hazard increasing occurrence	Y	N	N/A

V. Hazardous Atmospheres

A.	Atmosphere within the excavation tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard	Y	N	N/A
B.	Ventilation	Y	N	N/A
C.	Testing conducted often to ensure that the atmosphere remains safe	Y	N	N/A
D.	Emergency equipment, such as breathing apparatus, safety harness and line, and basket stretcher readily available where hazardous atmospheres could or do exist	Y	N	N/A
E.	Safety harness and life line used and individually attended when entering deep confined excavations	Y	N	N/A

VI. Support Systems

A.	Materials and/or equipment for support systems selected based on soil analysis, trench depth and expected loads	Y	N	N/A
B.	Materials and equipment used for protective systems inspected and in good condition	Y	N	N/A
C.	Materials and equipment not in good condition have been removed from service	Y	N	N/A
D.	Damaged materials and equipment used for protective systems inspected by a RPE after repairs and before being placed back into service	Y	N	N/A
E.	Protective systems installed without exposing employees to the hazards of cave-ins, collapses or from being struck by materials or equipment	Y	N	N/A
F.	Members of support system securely fastened to prevent failure	Y	N	N/A
G.	Support systems provided to insure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.	Y	N	N/A
H.	Excavations below the level of the base or footing approved by an RPE	Y	N	N/A
I.	Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure	Y	N	N/A
J.	Backfilling progresses with removal of support system	Y	N	N/A
K.	Excavation of material to a level no greater than 2 feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth	Y	N	N/A
L.	Shield system placed to prevent lateral movement	Y	N	N/A
M.	Employees are prohibited from remaining in shield system during vertical movement	Y	N	N/A

VII. Comments